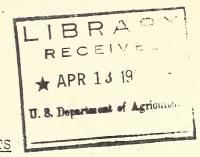
## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



1.93R



## FIGHTING CUTWORMS AND OTHER GARDEN PESTS

A radio talk by Mr. C. H. Popenoe, Bureau of Entomology, delivered through Station WRC and 16 other stations associated with the National Broadcasting Company, Monday April 1, 1929 at 1:23 p.m.

Every spring something gets into the blood of all of us that have a little spare ground, and like to see the green things sprouting from it in long straight rows. We get the garden patch ready and plant the seeds we ordered when the snow left. In a few days, thin lines of green are showing where the beans and peas were planted, and we scoop the cabbage and tomato plants out of the flats and line them out with tender care. It seems as though we could fairly see them grow, and every morning we go out and count heads, to see what else is beginning to show up. But there comes a morning when not every one is in its accustomed place. Where yesterday grew a sturdy tomato or a row of seedlings today merely a fallen and wilted top, or a line of tiny stems meets our horified gaze.

We become suspicious, and dig around the vacant spot with one finger. Three or four inches from where the plant stood, we can usually turn up a fat, smooth caterpillar about an inch or more long and sometimes showing faint stripes on the greasy-looking, dark gray background. This is the fellow we are after. Cutworms!

We could have stopped 'em last fall to a large extent by keeping down the young weeds in the garden. They were all hatched last midsummer, and wintered under rubbish, and now they have to make up for several months starvation, just when our plants are so small that it takes a good many to make a square meal.

Since we didn't begin last fall, the next best thing is to start now on a cutworm crusade. We must feed these half-starved legions something that will permanently distract their attention from our crops. You probably have some Paris green left around the house since last year. That will stop 'em. Take a peck of bran and stir a quarter of a pound of Paris green into it thoroughly. Then stir a pint of cheap molasses into half a bucket of water and mix this with the bran and Paris green to make a rather stiff mash. Be sure that the mash is well mixed, and let it stand all day. Then, just before the dusk when the cutworms come out of the ground, scatter the mash thinly along the rows, or, with transplanted vegetables or hill crops, put about a teaspoonful at the base of each plant. The mash is more attractive when it is wet. Of course, this mash is poisonous to chickens and livestock, so keep them out while the bait is exposed.



In order to keep down cutworms the next year, be particular. about allowing weeds, especially such kinds as pigweed and lambsquarter, to take the garden after the crops are laid by in midsummer. Clean up all crop remnants and grass under which the caterpillars may winter, before cold weather. I've heard it said that an ounce of prevention is worth a pound of cure.

Cutworms are likely to cause the first damage in the ordinary vegetable garden in the spring, but are not the only pests that damage seedlings when they first come out of the ground. Sometimes the little plants, especially radish, beets, and cucumber, will begin to look brownish. Close inspection will show little holes going nearly through the leaf, often from the underside. More than likely you will also see the little black hopping insects, looking like fleas, that are responsible for the damage. These are fleabetles. Fleabeetles are not easily handled, but plants can be protected partially by spraying them with Bordeaux mixture when the damage first begins to appear. A little arsenate of lead in the mixture sometimes helps. Dusting with Paris green and land plaster is also a good method.

Perhaps the leaves of our sprouting cucumbers are eaten full of somewhat larger holes. And yellow beetles about an eight of an inch long, with three black stripes down the back crawl or fly from the plants when we disturb them. If so, we can be sure that unless we take immediate action, we will have to replant. The striped cucumber beetle is with us.

A method of control is to dust the plants with calcium arsenate and gypsum or land plaster, using I part of calcium arsenate to 15 parts of the land plaster as soon as the beetles start to work, and as often thereafter as necessary to protect the developing plant. Screen or cloth covers can be used when there are only a few plants, or glass topped boxes will act as frames to push the seedlings until they can keep ahead of the beetles.

When the little green or blackish-louse-like insects called aphids or plant-lice begin to show up on the growing tips of the peas and under the leaves of other crops we must be ready for them. We usually find that the black-spotted red ladybird beetles or the yellow and black bee-like syrphus flies enlist with the gardener by feasting on the aphids. But sometimes the weather is too cold and wet for these helpers, and then we have to spray with nicotine to keep the aphids from getting away with the crop.

In the northern states, we sometimes find that a little white maggot bores into our cabbage and radish roots and often kills most of the plants. This is the cabbage maggot. Use a cheesecloth screen over your cabbage seedbed, and put tar paper discs around the stems of your young cabbage when you set them out, pressing them against the ground. Another method is to dissolve an ounce of corrosive sublimate in ten gallons of warm water, in a wooden vessel. Use half a cupful at the base of each plant, or about a quart to each ten feet of row when the plants are set out or come up, and three or four times afterward, at intervals of five or six days. This solution is also deadly to livestock which drink it.

்கில காட்சு இருந்து இருந்து அரிதாந்து நாகு மூர் மிரி காதாகரியா இரி இருந்தி இது நடி The second of the second property is a second of the secon The control of the second second of the control of and the second control of the second of

,只是我们的人们的人,我们的大概是一起是自己的特别,也是我们就是一种人们的人们的特别,也是我们的人们也是我们的人们也不会的人们。""我们是不是这个人,我们也不会 and the provide the company and the state of the provide the state of the light of the state of the second of The foregraph of the second of A CONTROL OF THE SECOND The state of the second se nam valo a via la velim le na diglia, impropilimanti a representati a representati a reconstruiti a reconstruit the control of the co "最后,我们们们的自己,我们就是这个人的人的,我们就是<mark>是一个人的,我们就是</mark>

The angle of the transformer of the transformer to the consent of the passes. The state of the s per transaction is track with the least with and much engine to be the con-Tors a selloce of come or excellent de to seem of see or for the come of seem of seem of the come of t

The appropriate the second of the control of the second of the second appropriate the second of the The second second to see the second s the control of the party forces and the first of the conserve. The second of th The state of a line production of the state of

. He is like the get of the second which have by the staying a factor of the in a complete the signal respect to a seriest which is each a to the emission to the The Control of the Co 自己的人类的人类对自己的人类的人,这种人的人类的基础,不是由于人类的人类的人类。 en de la grande de la Recentificación de la companya de la companya de la companya de la companya de la company La companya de la co

or the bound of the space of the ing the constraint of the second section is a and the second process to the and the second of the second 

and the age of the second second of the operation in the second section of the second secon

The server of

There are a good many other insect pests which I could mention if time permitted, but this talk deals only with the more common ones of early spring. The Department of Agriculture publishes a booklet, Farmers' Bulletin 1371, that is a regular rogues gallery of the common pests that you are likely to meet in your garden during the gardening season. The enlarged illustrations which fill it will help you spot the insect criminals which are raiding your own garden and sentence these bandits to the appropriate death recommended in the bulletin. We'll be glad to send it to you. Remember the number, Farmers' Bulletin 1371.

200 4 1 1 1 1 1 1 1 Wy C to and in A STATE OF THE STA